

RING-INTERFEROMETRIC SOL-GEL BIO-SENSOR

ABSTRACT

A biosensor embodying the invention includes a sensing
5 volume having an array of pores sized for immobilizing a
first biological entity tending to bind to a second
biological entity in such a manner as to change an index of
refraction of the sensing volume. The biosensor further
includes a ring interferometer, one volumetric section of
10 the ring interferometer being the sensing volume, a laser
for supplying light to the ring interferometer, and a
photodetector for receiving light from the interferometer.